

DOCUMENT RESUME

ED 313 638

CG 022 161

AUTHOR Harkins, Christine M.; And Others
TITLE The Ecology of Substance Use: Family Characteristics of High-Risk Teens.
SPONS AGENCY National Inst. on Drug Abuse (DHHS/PHS), Rockville, Md.
PUB DATE Aug 89
GRANT DAO4022
NOTE 22p.; Paper presented at the Annual Meeting of the American Psychological Association (97th, New Orleans, LA, August 11-15, 1989).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adolescents; *Family Characteristics; *Family Influence; *Parents; Predictor Variables; Secondary Education; Secondary School Students; *Substance Abuse

ABSTRACT

The most recent prescriptions for substance abuse prevention call for parent involvement in all phases of school and community programs, in addition to parent education programs. However, surprisingly little is known about the ways in which family variables influence patterns of adolescent substance use. This study examined a sample of families with an adolescent at high risk of substance use to determine the correlates and ecological precursors of substance abuse. Data were collected from parents (N=154) of middle and high school students identified as being at high risk for substance use. The results showed that families of high risk youth differed significantly from samples of "normal" or non-high risk families, and on some dimensions appeared to be quite similar to clinically distressed samples despite the absence of psychopathology and delinquency. Of particular interest was the fact that the high risk sample reported a higher incidence of exit life events, suggesting that preventive intervention relevant to life transitions and death of a friend or family member may be useful in reducing the impact of these events on family functioning. The findings offer support to systems notions of substance use, with low family cohesion, high conflict and dissatisfaction with family functioning in conjunction with parental perceptions of helplessness creating a climate with few barriers to adolescent substance use. (ABL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED313638

CG 022161

*The Ecology of Substance Use:
Family Characteristics of High-risk Teens*

Christine Harkins

Jean Ann Linney

Susan G. Forman

University of South Carolina

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Christine M.
Harkins

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

*Presented at the Annual Meeting of the American Psychological Association, August, 1989,
New Orleans. This work was supported by grant #DA04022 from the National Institute on Drug Abuse.*

The Ecology of Substance Use: Family Characteristics of
High-risk Teens

In recent years increasing attention has been drawn to the role of the family in adolescent substance abuse prevention and treatment. The most recent prescriptions for substance abuse prevention call for parent involvement in all phases of school and community programs, in addition to parent education programs (US Dept of Education, 1988). The family is a primary learning environment for the child, and although peer influence is strong during adolescence (the age of onset of substance use for many), negative peer influences are most likely when family support is perceived to be lacking.

Surprisingly little is known about the ways in which family variables influence patterns of teen substance use. Previous research on the impact of family variables on adolescent substance abuse has pointed to patterns of communication, hierarchical structure and alliances in the family, adaptability, emotional closeness, and problems of dependency as correlates of teenage addiction (Glynn, 1984). Communication patterns in these families involve a denial of the addiction, excessive use of intellectualization or rationalization and decreased intimacy and physical expression.

Families of adolescent drug addicts have been found to form a triadic pattern with one over-involved parent and one punitive or distant parent. Parents of adolescent drug users have been

found to be more inflexible in their roles than parents of nonusers. The parent-child relationships in these families appear more disrupted than relationships between non drug-using adolescents and their parents. Drug-abusing adolescents report having little impact on family processes and feeling little closeness with their parents. Emotional coldness and/or distance seems to characterize the relationships typical of families of adolescent drug-users.

Parents of drug users differ from nonusers' parents in parenting styles and discipline practices (Loeber & Dishion, 1983). Parents of drug users tend to make use of either authoritarian or laissez-faire disciplining styles, while parents of non-users discipline with a democratic style. Parents' problem-solving styles may serve as models for the ways in which children cope with their problems (Bowker, 1976; Cohen, 1976). Some have speculated that parental coping styles involving escape or substance use may be causally related to teenage substance use via modeling processes. Kandel (1982) found that parent drug using behaviors, parental attitudes and parent-child interactions predict initiation of drug use.

Most of the research on family correlates of substance use has been conducted with teenage addicts. This research has consisted primarily of reports obtained from the substance-abusing adolescent only. Rarely have family dynamics or parental attitudes been assessed from the parents' point of view. The

current study was designed to increase our knowledge of the correlates and ecological precursors of substance use by examining a sample of families with a teen at high risk for substance use. Family support, communication and conflict intensity were assessed from both the parental and teen perspectives. Parental coping styles, substance use, health status, life stress, and attitudes toward teen substance use were also assessed.

Method

Data were collected from 154 parents (representing 116 families) of middle and high school students identified as high risk for substance use. High risk was defined as the presence of two or more of the following risk factors: excessive school tardiness, excessive absences, poor academic performance, low self-esteem, substance use in the family or peer group, frequent school discipline incidents, poor social skills, and high anxiety. Students in the sample averaged four of these risk factors. The students were selected as part of a school-based prevention program and participated in a ten-week coping skills intervention designed to teach adaptive skills that the teens could implement to solve problems related to substance use and peer pressure.

Parents were contacted by mail to invite participation with follow-up phone calls to those who did not respond. Most parents completed the survey during an evening meeting at a local school,

however, a small number completed the assessment in their homes with a project interviewer. Participation was voluntary. Parents gave informed consent and were informed that their responses were protected by a Certificate of Confidentiality awarded to the project. Parents received \$25 for participation.

Participants completed the following measures: a) the Moos Health and Daily Living Scales (Moos, Cronkite, Billings, & Finney, 1987) which measure factors related to health and social functioning, life stressors, coping responses, social resources and sociodemographic information; b) Family Adaptability and Cohesion Evaluation Scale (FACES II) (Olson, Bell & Portner, 1981) which is a measure of the extent of flexibility and connectedness within a family; c) the Interaction Behavior Questionnaire (Prinz, Foster, Kent & O'Leary, 1979) which is a 44-item instrument that assesses the degree of parent-child conflict in the family; d) the Issues Checklist (Prinz, et al, 1979), a 44-item measure of the intensity and frequency with which certain issues (money, sex, curfews, chores, etc.) are problematic in the home; e) a substance use questionnaire (Oregon Social Learning Center, 1984) measuring the frequency and volume of parents' substance use; and, f) the Parents' Attitudes Toward Teen Substance Use questionnaire (PATTSU), a measure developed for this project to assess parents' attitudes about how their own substance use affects their teens, and parents' perceptions about how much influence they have over their teens'

involvement with alcohol and other drug use. The measure is scored for six empirically derived factors. Test-retest reliability over one month ranged from a low of .74 on one of the factors to a high of .89 on another. Scores on the PATTSU factors significantly differentiated high risk families from non high risk families (Linney, Forman & Egan, 1989).

Results

The 116 families who participated in this study came from both rural and urban areas of central South Carolina and represent all socioeconomic levels. The students of these families were selected from 13 high schools and 16 middle schools in seven school districts in central South Carolina. The students represent a sample substantially at risk because of their low academic performance, discipline problems at school, and low self-concept as reported by school personnel. Table 1 shows the prevalence of each risk factor in the student sample.

Insert Table 1 about here

Table 2 summarizes the demographic characteristics of the sample of parent respondents. The demographics of this sample are not significantly different from the census data available for the greater metropolitan area.

Insert Table 2 about here

Table 3 shows a comparison of the high risk sample of this study with the clinically depressed sample and random community sample reported by Moos, et al (1985). The high risk sample differed significantly from both samples on nine of the sixteen dimensions of the Moos Health and Daily Living Scales. The study sample was significantly higher than the clinic sample in the incidence of exit life events, such as the death of a spouse or close friend, divorce, and children leaving home. The high risk sample was not different from the depressed sample, but was significantly different from the community sample on use of medication, non mental health seeking, and the number of medical conditions reported.

Insert Table 3 about here

On the coping skills dimensions of the Moos Health and Daily Living Scale the high risk group is quite similar to the community sample reported by Moos. They differ significantly only on the information seeking and avoidance dimensions, reporting more frequent use of these strategies as coping skills.

On the FACES II the high risk sample of parents report significantly lower cohesion ($t = 9.87, p < .025$) and

adaptability ($t = 4.90, p < .025$) than the normative samples reported by Olson, Bell & Portner (1981). Means for the FACES II responses are presented in Table 4. Patterns for high risk adolescents are similar to those of their parents, as they also report significantly lower cohesion ($t = 5.25, p < .005$) and adaptability ($t = 3.27, p < .005$) than Olson et al's (1981) normative sample of adolescents. The high risk adolescents differed from their parents reporting significantly lower cohesion ($t = 5.02, p < .000$) and adaptability ($t = 3.94, p < .000$). Less than half of the parents (44%) and adolescents (41%) rate their families as being in one of the four categories which Olson et al (1981) considered balanced, while 24% of the parents and 31% of the adolescents indicate that their families fall into one of the four categories considered by Olson et al (1981) to be dysfunctional.

Both parents and adolescents indicate that they desire higher levels of cohesion ($t = 11.2, p < .000$ for parents and $t = 24.1, p < .000$ for teens) and adaptability ($t = 12.9, p < .000$ and $t = 4.55, p < .000$, respectively) than they perceive in their families. Parents indicated an ideal level of adaptability that was significantly higher ($t = 6.95, p < .000$) than that of their adolescents, as well as an ideal level of cohesion that was significantly lower ($t = 10.77, p < .000$) than that desired by the adolescents. Thirty-one percent of the parents report ideal levels of cohesion and adaptability that fall into one of the

balanced categories, while only 1% of the adolescents indicate any of these categories as ideal. Nearly a quarter (24%) of the parents and almost half (40%) of the adolescents select one of Olson et al's dysfunctional categories as ideal.

Insert Table 4 about here

The Interaction Behavior Questionnaire and the Issues Checklist show a similar pattern with the high risk sample differing significantly from both non-distressed and distressed samples. Means for the Issues Checklist and Interaction Behavior Questionnaire are presented in Table 5. For both one- and two-way conflicts, assessed with the Interaction Behavior Questionnaire, parents and teens reported more conflict than the non-distressed sample, but less than the distressed sample. Adolescents reported significantly fewer issues as being problematic when compared to both distressed and non-distressed samples, while their mothers reported comparatively no significant quantity differences. Mothers indicated that issues were discussed with more intensity than that reported by the non-distressed sample, but less than that of the distressed sample. Their teens also indicated discussing issues with an intensity greater than that reported by the non-distressed sample but not significantly different from that of the distressed sample.

Insert Table 5 about here

The high risk sample of parents report patterns of substance use not dissimilar from surveys of the general population. However, parents of the high risk adolescents differed from a normative sample of parents with teen-aged children on three of the six factors of the PATTSU. The high risk sample of parents report more permissive views of adolescent alcohol use than the normative sample ($t = 5.37, p < .000$). These high risk parents also indicate more concern about marijuana use by adolescents than the normative sample of parents ($t = 2.41, p < .017$). The high risk parents' scores on the PATTSU differ significantly from that of the normative sample in terms of how much they feel they can control the adolescents' substance use ($t = 3.37, p < .001$). These high risk parents indicate that they feel they have little or no control over their teen's substance use.

Discussion

These data suggest that families of high risk youth differ significantly from samples of "normal", or non high risk families, and on some dimensions appear to be quite similar to clinically distressed samples despite the absence of psychopathology and delinquency. Of particular interest is the fact that the high risk sample reports a higher incidence of exit life events, suggesting that preventive intervention relevant to

life transitions and death of a friend or family member may be useful in reducing the impact of these events on family functioning.

The similarity between this sample and the normal comparison in coping styles is striking. The high risk sample differed from the community sample only on the information seeking and avoidance dimensions. Information seeking consists of such strategies as talking with relatives, friends, or professionals about the problem, praying, and seeking help from persons with similar experiences. This strategy was commonly used by those in the community sample, and was used even more frequently by the high risk parents. The high risk sample also made more use of avoidance coping strategies than did the normative sample, who used avoidance styles less than any other coping strategy. Avoidance coping involves strategies such as keeping feelings inside, avoidance of or hostility toward others, denial, and attempting to decrease tension by smoking, eating, or taking tranquilizing drugs. Use of such coping techniques by parents may serve as a model to adolescents.

The data suggest that a family atmosphere of low cohesion and adaptability exists in these high risk families. Parents and their adolescents have different ideas about optimal levels of flexibility and connectedness in the family. Parents want to have more flexible roles within the family than their adolescents perceive as ideal, while adolescents desire more cohesiveness in

the family than do their parents. Adolescents aspire to a family model that is quite similar to that found in the families of addicts. This is noteworthy in that it suggests that the experience of low cohesion and adaptability may have created unrealistic expectations about family relationships, or an ideal that may be equally as dysfunctional as their current patterns. These data suggest that family dynamics should be an important focus of substance use prevention programs.

Parental feelings of helplessness may further contribute to the risk status and ultimate substance use patterns of the teenagers in these families. Parents who feel helpless with regard to teen substance use may be less likely to actively confront substance use by their children, and thus fail to communicate the message that substance use is unacceptable. Preventive efforts to enhance parental sense of influence with respect to teen behavior seem warranted.

These findings offer support to systems notions of substance use, with low family cohesion, high conflict and dissatisfaction with family functioning, in conjunction with parental perceptions of helplessness creating a climate with few barriers to teen substance use. The findings of this study are particularly noteworthy in that the risk status of the adolescents was determined on the basis of behavioral attributes, rather than on strictly demographic variables, and the adolescents are not already heavy substance users. The sample families are not

necessarily at risk because of low income, minority status, or the life stress associated with these two variables. While the current study is only descriptive in nature and longitudinal analysis is necessary, these data on at-risk youth are consistent with existing research on drug-abusing adolescents, suggesting that family functioning may play an important role in the onset of early experimentation and substance use.

References

- Bowker, L.H. (1976). Drug Use at a Small Liberal Arts College.
San Francisco: R & E Research Associates.
- Cohen, S.J. (1976). Drug use, misuse, and abuse incidents among elementary school children. Journal of Drug Education, 6, 247-253.
- Glynn, T. (1984) Adolescent drug use and the family environment: A review. Journal of Drug Issues, 14, 271-295.
- Kandel, D. B. (1982). Epidemiological and psychosocial perspectives on adolescent drug use. Journal of American Academic Clinical Psychiatry, 21(4), 328-347.
- Linney, J.A., Forman, S.G. & Egan, M.A. (1989). Development and validation of a measure to assess parental attitudes toward teen substance use. Unpublished manuscript, Univeristy of South Carolina.
- Loeber, R. & Dishion, T. (1983). Early predictors of male delinquency: A review. Psychological Bulletin, 93, 68-99.
- Moos, R. H., Cronkite, R. C., Billings, A. G., & Finney, J. W. (1985). Health and Daily Living Form Manual. Stanford, CA: Social Ecology Laboratory.
- Olson, D.H., Bell, R. & Portner, J. (1981). FACES II - Family Adaptability & Cohesion Evaluation Scales. St Paul: University of Minnesota
- Oregon Social Learning Center, (1984). Substance use survey. Eugene, OR.

Prinz, R., Foster, S., Kent, J. & O'Leary, D. (1979).

Multivariate assesement of conflict in distressed and
nondistressed mother-adolescent dyads. Journal of Applied
Behavior Analysis, 12, 691-700.

US Department of Education (1988). Drug Prevention Curricula: A
guide to selection and implementation. Washington, D. C.: US
Government Printing Office.

TABLE 1

Percentage of Adolescents with Each Risk Factor

Poor school attendance	14.0
High anxiety	22.7
Excessive tardiness	14.1
Impulsiveness	44.2
Frequent disciplinary incidents	36.0
Experimental drug/alcohol use	18.4
Poor academic performance	67.8
Habitual drowsiness, sleeping in class	16.1
Low self-confidence/low self-esteem	59.3
Acting out, fighting, verbal abuse	36.8
Involvement with peers suspected of use	32.2
Negative changes in appearance/hygeine	7.1
Difficuly dealing with authority	33.3
Decreases in involvement with activities	31.4
Poor social skills	32.1
Withdrawn, isolated	14.3
Substance use in the family	6.0
Unusual mood swings	31.8
Appearance of being under influence of drugs/alcohol at school	12.8

Table 2

Demographic Characteristics
of Parent Respondents

MEAN AGE	40.92 years (sd = 9.05)	
EDUCATION	8th grade or less	6%
	some high school	55%
	high school degree	10%
	some college	23%
	college degree or more	6%
ETHNIC BACKGROUND	Native American	2%
	Asian	1%
	Black	22%
	Hispanic	3%
	White	72%
MARITAL STATUS	never married	6%
	married	72%
	separated	4%
	divorced	14%
	widowed	5%
LENGTH OF MARRIAGE	18.31 years (sd = 13.8)	
TOTAL ANNUAL INCOME	< \$ 7,000	8%
	7,000 - 9,999	8%
	10,000 - 19,999	26%
	20,000 - 29,999	16%
	30,000 - 39,999	13%
	> 40,000	30%
AVERAGE # OF CHILDREN AT HOME	2.68 (sd = 5.57)	

Table 3
Means and Pairwise comparisons on Moos Health
and Daily Living Scales

	Depressed	Community	High Risk	Scheffe' Critical diff.
Physical Symptoms	5.50 A	2.25 B	4.09 C	.704
Medical conditions	.98 A	.47 B	1.23 A	.303
Global depression	43.95 A	19.21 B	23.15 C	1.770
Depressed mood	17.86 B	7.27 A	6.51 A	.859
Endogenous depression	18.55 A	7.97 B	10.21 C	.983
Depressive features	26.09 A	11.95 B	15.07 C	1.196
Medication Use	2.64 A	2.01 B	2.81 A	.475
Exit events	.53 A	.32 B	.78 C	.189
Negative life events	2.40 A	1.35 B	1.88 C	.486
Active Behavioral coping	20.51 B	19.49 A B	17.86 A	2.040
Avoidance coping	7.90 A	3.55 B	5.04 C	.945
Information seeking	12.41 A	10.61 B	17.10 C	1.290
Problem solving	7.75 B	8.88 A	9.00 A	.980
Emotional distancing	5.79 B	3.39 A	3.72 A	.782
Mental health 12 mo.	1.67 A	.37 B	.93 C	.169
Non mental health 12 mo.	.67 A	.33 B	.75 A	.218

Note: Groups with the same letters are not significantly different

Table 4
Means for FACES II

<u>Sample</u>	COHESION		ADAPTABILITY	
	<u>Real</u>	<u>Ideal</u>	<u>Real</u>	<u>Ideal</u>
High Risk Parent	56.8 (10.9)	67.9 (8.2)	46.8 (7.2)	56.3 (7.0)
High Risk Teen	50.0 (10.0)	81.7 (9.2)	42.0 (8.9)	48.0 (9.9)
Normative Parent	64.9 (8.4)	----	49.9 (6.6)	----
Normative Teen	56.3 (9.2)	----	45.4 (7.9)	----

Table 5

CHILD BEHAVIOR CHECKLIST:

	DISTRESSED		SC High-risk		NON DISTRESSED	
	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
PARENT APPRAISE CHILD	28.89	8.52	11.37	6.95	7.88	5.14
	A		B		C	
PARENT APPRAISE DYAD	11.29	4.72	4.48	3.54	2.26	1.69
	A		B		C	
CHILD APPRAISE DYAD	9.55	5.55	5.75	3.74	3.19	2.64
	A		B		C	
CHILD APPRAISE PARENT	19.88	12.60	13.50	2.62	6.18	6.77
	A		B		C	

ISSUES CHECKLIST:

MOTHER INTENSITY	2.60	.69	2.39	.75	1.74	.49
	A		B		C	
ADOLESCENT INTENSITY	2.46	.60	2.47	.91	1.82	.52
	A		A		B	
MOTHER QUANTITY	19.71	7.66	19.92	8.26	19.29	7.75
	A		A		A	
ADOLESCENT QUANTITY	24.31	8.41	14.56	8.86	19.71	7.50
	A		B		A	
INTENSITY X FREQUENCY (PARENT)	1.72	3.54	2.65	.95	.60	1.19
	A		A		B	
INTENSITY X FREQUENCY (ADOLESCENT)	1.45	2.44	2.74	1.42	.59	.88
	A		B		C	

* Post Hoc tests calc using Sheffe' and $F(2,191 \text{ or } 270, .01)=4.61$
Means with matching letters are not significantly different.